CLAIMS

1. A method, comprising the steps of:

detecting that an operation on a register and counter block is needed; enabling a clock signal to the register and counter block; and

- executing the operation on the register and counter block through employment of the clock signal.
 - 2. The method of claim 1, further comprising the step of:

disabling the clock signal to the register and counter block after execution of the operation.

- 3. The method of claim 1, wherein the executing step comprises the step of:

 programming a control register in the register and counter block.
 - 4. The method of claim 1, wherein the register and counter block is in a media access control (MAC) component.
 - 5. The method of claim 4, wherein the detecting step comprises the step of:
- detecting an interrupt signal from the media access control component.
 - 6. The method of claim 5, wherein the enabling step comprises employing the interrupt signal to enable the clock signal.



7. The method of claim 1, wherein the executing step comprises:

reading at least one of a remote monitor (RMON) counter and a status register in the register and counter block.

5 8. A method for reading a storage component in a media access control component comprising the steps of:

detecting an update to the storage component;

providing a clock signal to the storage component in response to detection of the update; and

reading the storage component through employment of the clock signal.

- 9. The method of claim 8, wherein the storage component is one of a status register and a remote monitor (RMON) counter.
- 10. The method of claim 8, further comprising the step of:

disabling the clock signal after the storage component has been read.

15 11. A method for programming a storage component in a media access control component comprising:

determining that the storage component needs to be programmed;





providing a clock signal to the control register in response to a determination that the storage component needs to be programmed; and

programming the storage component through employment of the clock signal.

- 12. The method of claim 11, further comprising:
- 5 disabling the clock signal after the storage component has been programmed.
 - 13. The method of claim 11, wherein the storage component is a control register.
 - 14. A system comprising:
 - a detection unit that detects that an operation on a register and counter block is needed;
 - a clock enable unit that enables a clock signal to the register and counter block in response to a detection that the operation is needed; and
 - application logic that executes the operation on the register and counter block through employment of the clock signal.
 - 15. The system of claim 14, further comprising:
- a clock disable unit that disables the clock signal to the register and counter block after execution of the operation.
 - 16. The system of claim 14, wherein the application logic comprises:
 - a control register program unit that programs a control register in the register and counter block.



- 17. The system of claim 14, wherein the register and counter block is part of a media access control component.
- 18. The system of claim 17, wherein the detection unit comprises:
- a logic component that detects an interrupt signal from the media access control component
 - 19. The system of claim 18, wherein the clock enable unit comprises a logic component that employs the interrupt signal to enable the clock signal.
 - 20. The system of claim 14, wherein the application comprises:

at least one of a status register read unit that reads a status register and a remote monitor counter read unit that reads a remote monitor (RMON) counter.

21. A system for performing an operation on a storage component in a media access control component comprising:

clock gating logic that detects that an operation on the storage component is to be performed and enables a clock signal to the storage component in response to a detection that an operation is to be performed; and

application logic that performs the operation on the storage component through employment of the clock signal.





- 22. The system of claim 21, wherein the storage component is one of a status register, a control register, and a remote monitor (RMON) counter.
- 23. The system of claim 20, wherein the clock gating logic disables the clock signal after the operation has been performed.

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